| Updt | Database | Query | Time | Comment |
|---|---|---|---|---|
| S1126 | | | | |
| U | USPT,PGPB,JPAB,EPAB,DWPI | (kit and antibody and (mycobacterium or mycoplasma or listeria) ) and kit.clm. and antibody.clm. | 2002-09-30 16:35:22 | |
| S1125 | | | | |
| U | USPT,PGPB,JPAB,EPAB,DWPI | kit and antibody and (mycobacterium or mycoplasma or listeria) | 2002-09-30 16:34:37 | |
| S1124 | | | | |
| U | USPT,PGPB,JPAB,EPAB,DWPI | ((kit and antibody and DNA and (mycobacterium or mycoplasma or listeria) )and antibody.clm. ) and kit.clm. | 2002-09-30 16:28:15 | |
| S1123 | | | | |
| U | USPT,PGPB,JPAB,EPAB,DWPI | (kit and antibody and DNA and (mycobacterium or mycoplasma or listeria) ) and antibody.clm. | 2002-09-30 16:28:02 | |
| S1122 | | | | |
| U | USPT,PGPB,JPAB,EPAB,DWPI | kit and antibody and DNA and (mycobacterium or mycoplasma or listeria) | 2002-09-30 16:26:36 | |
| S1121 | | | | |
| U | USPT,PGPB | 5989553.pn. and synthetic | 2002-09-30 10:33:47 | |
| S1120 | | | | |
| U | | | | |

USPT,PGPB

5703057.pn.

2002-09-30
09:44:14

S1119

U

USPT,PGPB

5989553.pn.

2002-09-30
09:43:26

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=> s expression library and antibody
         522510 EXPRESSION
          10237 EXPRESSIONS
         527387 EXPRESSION
                  (EXPRESSION OR EXPRESSIONS)
          46904 LIBRARY
          13871 LIBRARIES
          53630 LIBRARY
                  (LIBRARY OR LIBRARIES)
           2423 EXPRESSION LIBRARY
                  (EXPRESSION(W)LIBRARY)
         398626 ANTIBODY
         413096 ANTIBODIES
         615119 ANTIBODY
                  (ANTIBODY OR ANTIBODIES)
L1         1272 EXPRESSION LIBRARY AND ANTIBODY

=> s l1 and DNA
         662104 DNA
          11366 DNAS
         663484 DNA
                  (DNA OR DNAS)
L2          998 L1 AND DNA

=> s expression(w)library and antibody
         522510 EXPRESSION
          10237 EXPRESSIONS
         527387 EXPRESSION
                  (EXPRESSION OR EXPRESSIONS)
          46904 LIBRARY
          13871 LIBRARIES
          53630 LIBRARY
                  (LIBRARY OR LIBRARIES)
           2423 EXPRESSION(W)LIBRARY
         398626 ANTIBODY
         413096 ANTIBODIES
         615119 ANTIBODY
                  (ANTIBODY OR ANTIBODIES)
L3         1272 EXPRESSION(W)LIBRARY AND ANTIBODY

=> s l3 and DNA and immunize
         662104 DNA
          11366 DNAS
         663484 DNA
                  (DNA OR DNAS)
           1584 IMMUNIZE
             32 IMMUNIZES
           1615 IMMUNIZE
                  (IMMUNIZE OR IMMUNIZES)
L4            5 L3 AND DNA AND IMMUNIZE

=> display l4
ENTER ANSWER NUMBER OR RANGE (1):1-5
ENTER DISPLAY FORMAT (BIB):bib abs

L4   ANSWER 1 OF 5     MEDLINE
AN   1999360933     MEDLINE
DN   99360933   PubMed ID: 10433551
TI   Genetic live vaccines mimic the antigenicity but not pathogenicity of live
     viruses.
AU   Sykes K F; Johnston S A
CS   Center for Biomedical Inventions, Department of Internal Medicine, The
     University Texas-Southwestern Medical Center, Dallas 75235-8573, USA..
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sykes@ryburn.swmed.edu
SO DNA AND CELL BIOLOGY, (1999 Jul) 18 (7) 521-31.
Journal code: 9004522. ISSN: 1044-5498.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 199908
ED Entered STN: 19990910
Last Updated on STN: 19990910
Entered Medline: 19990826
AB The development of an effective HIV vaccine is both a pressing and a formidable problem. The most encouraging results to date have been achieved using live-attenuated immunodeficiency viruses. However, the frequency of pathogenic breakthroughs has been a deterrent to their development. We suggest that **expression libraries** generated from viral **DNA** can produce the immunologic advantages of live vaccines without risk of reversion to pathogenic viruses. The plasmid libraries could be deconvoluted into useful components or administered as complex mixtures. To explore this approach, we designed and tested several of these genetic live vaccines (GLVs) for HIV. We constructed libraries by cloning overlapping fragments of the proviral genome into mammalian expression plasmids, then used them to **immunize** mice. We found that inserting library fragments into a vector downstream of a secretory gene sequence led to augmented **antibody** responses, and insertion downstream of a ubiquitin sequence enhanced cytotoxic lymphocyte responses. Also, fragmentation of gag into subgenes broadened T-cell epitope recognition. We have fragmented the genome by sequence-directed and random methods to create libraries with different features. We propose that the characteristics of GLVs support their further investigation as an approach to protection against HIV and other viral pathogens.

L4 ANSWER 2 OF 5 MEDLINE
AN 1999343758 MEDLINE
DN 99343758 PubMed ID: 10415048
TI Protective immune responses induced by vaccination with an expression genomic library of Leishmania major.
AU Piedrafita D; Xu D; Hunter D; Harrison R A; Liew F Y
CS Department of Immunology, University of Glasgow, Glasgow, United Kingdom.
SO JOURNAL OF IMMUNOLOGY, (1999 Aug 1) 163 (3) 1467-72.
Journal code: 2985117R. ISSN: 0022-1767.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199908
ED Entered STN: 19990820
Last Updated on STN: 19990820
Entered Medline: 19990812
AB To develop an effective vaccine against the intracellular protozoan parasite Leishmania spp., we investigated the feasibility of **expression library** immunization (ELI) in the mouse. Genomic **expression libraries** of L. major were constructed and used to **immunize** mice. One of the three libraries (L1, with 10(5) clones) induced a significant protective immune response and delayed the onset of lesion development in highly susceptible BALB/c mice after i.m. immunization, compared with control mice immunized with the empty vector (EV). L1 was then divided into five sublibraries of approximately 2 x 10(4) clones each. Mice immunized with one of the sublibraries (SL1A) developed an even stronger protective effect than that induced by L1. SL1A was further divided into 20 sublibraries (SL2) of approximately 10(3) clones each. One of the SL2 libraries (SL2G) induced a strong protective effect against L. major infection. In direct comparative

studies, the protective effect of the sublibraries was in the order of SL2G > SL1A > L1. Lymphoid cells from mice vaccinated with SL2G produced more IFN-gamma and NO, compared with cells from control mice injected with EV. Serum from the vaccinated mice also contained more parasite-specific IgG2a Ab, compared with controls. Therefore, these data demonstrate that ELI is feasible against this complex intracellular parasitic infection, by preferentially inducing the development of Th1 responses. Furthermore, by sequential division of the libraries, this approach may be used to enrich and identify protective genes for effective gene vaccination against other parasitic infections.

L4 ANSWER 3 OF 5 MEDLINE
AN 97234635 MEDLINE
DN 97234635 PubMed ID: 9079909
TI Sequence analysis and characterization of a 40-kilodalton Borrelia hermsii glycerophosphodiester phosphodiesterase homolog.
AU Shang E S; Skare J T; Erdjument-Bromage H; Blanco D R; Tempst P; Miller J N; Lovett M A
CS Department of Microbiology and Immunology, UCLA School of Medicine, Los Angeles, California 90095, USA.. eshang@microimmun.medsch.ucla.edu
NC AI-21352 (NIAID)
AI-29733 (NIAID)
AI-37312 (NIAID)
+
SO JOURNAL OF BACTERIOLOGY, (1997 Apr) 179 (7) 2238-46.
Journal code: 2985120R. ISSN: 0021-9193.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-U65980
EM 199704
ED Entered STN: 19970507
Last Updated on STN: 19990129
Entered Medline: 19970429
AB We report the purification, molecular cloning, and characterization of a 40-kDa glycerophosphodiester phosphodiesterase homolog from Borrelia hermsii. The 40-kDa protein was solubilized from whole organisms with 0.1% Triton X-100, phase partitioned into the Triton X-114 detergent phase, and purified by fast-performance liquid chromatography (FPLC). The gene encoding the 40-kDa protein was cloned from a B. hermsii chromosomal **DNA** lambda EXlox **expression library** and identified by using affinity **antibodies** generated against the purified native protein. The deduced amino acid sequence included a 20-amino-acid signal peptide encoding a putative leader peptidase II cleavage site, indicating that the 40-kDa protein was a lipoprotein. Based on significant homology (31 to 52% identity) of the 40-kDa protein to glycerophosphodiester phosphodiesterases of Escherichia coli (GlpQ), Bacillus subtilis (GlpQ), and Haemophilus influenzae (Hpd; protein D), we have designated this B. hermsii 40-kDa lipoprotein a glycerophosphodiester phosphodiesterase (Gpd) homolog, the first B. hermsii lipoprotein to have a putative functional assignment. A nonlipidated form of the Gpd homolog was overproduced as a fusion protein in E. coli BL21(DE3)(pLysE) and was used to **immunize** rabbits to generate specific antiserum. Immunoblot analysis with anti-Gpd serum recognized recombinant H. influenzae protein D, and conversely, antiserum to H. influenzae protein D recognized recombinant B. hermsii Gpd (rGpd), indicating antigenic conservation between these proteins. Antiserum to rGpd also identified native Gpd as a constituent of purified outer membrane vesicles prepared from B. hermsii. Screening of other pathogenic spirochetes with anti-rGpd serum revealed the presence of antigenically related proteins in Borrelia burgdorferi, Treponema pallidum, and Leptospira kirschneri. Further sequence analysis both upstream and downstream of the Gpd homolog showed additional homologs of glycerol metabolism, including a

glycerol-3-phosphate transporter (GlpT), a glycerol-3-phosphate dehydrogenase (GlpD), and a thioredoxin reductase (TrxB).

L4 ANSWER 4 OF 5 MEDLINE
AN 96026302 MEDLINE
DN 96026302 PubMed ID: 7566175
TI Protection against mycoplasma infection using **expression-library** immunization.
AU Barry M A; Lai W C; Johnston S A
CS Department of Medicine, University of Texas Southwestern Medical Center, Dallas 75235-8573, USA.
SO NATURE, (1995 Oct 19) 377 (6550) 632-5.
Journal code: 0410462. ISSN: 0028-0836.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 199511
ED Entered STN: 19951227
Last Updated on STN: 19951227
Entered Medline: 19951114
AB As is evident from the human immunodeficiency virus epidemic, there is no systematic method for producing a vaccine. Genetic immunization is a new approach to vaccine production that has many of the advantages of live/attenuated pathogens but no risk of infection. It involves introducing **DNA** encoding a pathogen protein into host cells and has shown promise in several disease models. Here we describe a new method for vaccine development, **expression-library** immunization, which makes use of the technique of genetic immunization and the fact that all the antigens of a pathogen are encoded in its **DNA**. An **expression library** of pathogen **DNA** is used to **immunize** a host thereby producing the effects of antigen presentation of a live vaccine without the risk. We show that even partial **expression libraries** made from the **DNA** of Mycoplasma pulmonis, a natural pathogen in rodents, provide protection against challenge from the pathogen. **Expression library** immunization may prove to be a general method for vaccination against any pathogen.

L4 ANSWER 5 OF 5 MEDLINE
AN 90175386 MEDLINE
DN 90175386 PubMed ID: 2408041
TI Molecular cloning of a cDNA encoding a major pathogenic domain of the Heymann nephritis antigen gp330.
AU Pietromonaco S; Kerjaschki D; Binder S; Ullrich R; Farquhar M G
CS Department of Cell Biology, Yale University School of Medicine, New Haven, CT 06510.
NC DK08096 (NIDDK)
DK17724 (NIDDK)
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1990 Mar) 87 (5) 1811-5.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-M31051
EM 199004
ED Entered STN: 19900601
Last Updated on STN: 19900601
Entered Medline: 19900406
AB Heymann nephritis is an experimental autoimmune disease in rats that is characterized by accumulation of immune deposits (IDs) in kidney glomeruli. The disease is initiated by the binding of circulating

**antibodies** to a membrane glycoprotein, gp330, which is a resident protein of clathrin-coated pits on glomerular epithelial cells (podocytes). We have defined a domain representing about 10% of gp330 that appears to be responsible for the formation of stable glomerular IDs. A cDNA clone (clone 14) was isolated from a rat kidney cDNA **expression library** by screening with IgG eluted from glomeruli of rats in early stages (3 days) of passive Heymann nephritis. The clone 14 cDNA contains an open reading frame encoding the C-terminal 319 amino acids of gp330. The predicted amino acid sequence contains four internal repeats of 11 amino acids, which are also found in the putative ligand-binding region of carbohydrate-binding lectin-like receptors. An **antibody** raised against the clone 14 fusion protein recognized gp330 by immunoblotting and induced formation of subepithelial IDs typical of passive Heymann nephritis when injected into normal rats. When the clone 14 fusion protein was used to **immunize** rats, subepithelial IDs of active Heymann nephritis were found after 12 weeks. No IDs were formed by active or passive immunization of rats with fusion proteins derived from other regions of gp330. These results demonstrate that clone 14 encodes a region of gp330 responsible for **antibody** binding and ID formation in vivo.

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---Logging off of STN---

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Executing the logoff script...

=> LOG Y

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 3.28 | 3.49 |

STN INTERNATIONAL LOGOFF AT 10:19:01 ON 30 SEP 2002